tech.mit.edu

Volume 134, Number 36



WEATHER, p. 2

TUE: 70° F | 61° F

Partly cloudy

WED: 70° F | 60° F

Partly cloudy

THU: 76° F | 64° F

Chance showers

Tuesday, September 9, 2014

Austin Travis, grad student in chemistry, dead at age 26

Cause and manner of death yet to be determined



Austin L. Travis G - Photo courtesy of the Imperiali Group

By Austin Hess

EDITOR IN CHIEF

President L. Rafael Reif emailed the MIT community last Friday afternoon to announce that chemistry graduate student Austin L. Travis, 26,

had died Wednesday, Sept. 3.

Reif's email said that Travis, from Pleasantville, New York, was also well known within the biology department, as he worked in Barbara Imperiali's protein lab. He said that Travis lived off campus.

Cambridge police told the *Boston Globe* that a 26-year-old man had been pronounced dead in his Cambridge apartment following a call by his girlfriend around 6 p.m. but did not identify the man.

According to the *Globe*'s Friday article, Cambridge police, still investigating the case, said a hazardous materials team was called to the scene and was still working to identify material found there.

MIT did not provide information on the circumstances of Travis' death.

A spokesperson for the Massachusetts state medical examiner's office said that the cause and manner of the death are pending.

Imperiali wrote to *The Tech* that letters sent to the chemistry and biology departments read, "Austin had a passion for chemistry and biochemistry and he was active in outreach to local high schools. He enjoyed working with undergraduates, especially in the classroom, and was recognized for his outstanding contributions as a teaching assistant." Travis was involved in the MIT triathlon and Shotokan karate clubs and interested in several other sports, including volleyball.

Travis, Page 9

BitComp projects aim to encourage students to spend their bitcoin

Apps developed for competition try to increase cryptocurrency's accessibility

By Patricia Z. Dominguez

STAFF REPORTER

MIT's BitComp, a summer-long competition to incentivize bitcoinrelated development to correspond to an upcoming distribution of the cryptocurrency to undergraduates, announced its winners last week.

The competition is part of an ever-growing presence of bitcoin at MIT, a trend that began when Jeremy L. Rubin '16 and Sloan student Dan B. Elitzer announced in April that one hundred dollars worth of bitcoin would be doled out to every MIT undergraduate during the fall 2014 semester. In the same vein, the Kendall COOP announced it has begun to accept bitcoin.

BitComp awarded a \$5,000 grand prize and five \$1,500 category awards, according to its announcement. The grand prize went to a team called Ethos that was composed of MIT graduate students Amir Lazarovich and Guy Zyskind as well as bitcoin entrepreneur Oz

Nathan. Ethos successfully built a prototype of a decentralized network that uses bitcoin technology to share and store personal data, according to the competition's press release

"We hope that in a few years, the paradigm for personal data storage will be different," Lazarovich wrote in an email to *The Tech*. "Instead of online companies storing our personal data in nontransparent ways, people will use Ethos to control their online identity."

BitComp's Engineering Award was given to Brandon A. Miranda '15 for his project, CoinJoin. This award was given to the application or service that featured "impressive engineering or that was effective in demonstrating the capabilities of bitcoin." CoinJoin is a protocol that allows users of BitCoin to safely "mix" their bitcoin with those of others by enhancing the users' privacy. In an email to *The Tech*, Mi-

Bitcoin, Page 9

Analysis: US schools that enroll both rich and poor

Harvard deemed generous, CalTech less so

By David Leonhardt

Vassar has taken steps to hold down spending on faculty and staff. Amherst and the University of Florida have raised new money specifically to spend on financial aid for low-income students. American University reallocated scholarships from well-off students to needy ones. Grinnell set a floor on the share of every freshman class — 15 percent — whose parents

Over the last decade, dozens of colleges have proclaimed that recruiting a more economically diverse student body was a top priority. Many of those

colleges have not matched their words with actions. But some have.

These colleges have changed policies and made compromises elsewhere to recruit the kind of talented poor students who have traditionally excelled in high school but not gone to top colleges. A surprising number of such students never graduate from any college.

This education gap is a problem not only for the teenagers on the wrong end of it. It's a problem for the American economy. The economic differences between college graduates and everyone else have

Universities, Page 8

Apple expands Kendall Square space

Apple is quietly expanding its Kendall Square research office, according to an article in BetaBoston, a website operated by the *Boston Globe*.

The expansion will add to the current office located at MIT-owned 101 Main Street just West of E90. News of Apple's first Cambridge office originally broke in a January 2013 *Boston Globe* article. At the time, the space fit just four to five employees.

It was later revealed in a July 2013 xconomy. com article that the small office was used to house a small team of researchers working on Siri, including former employees from Nuance, a company with an important role in providing the voice technology that powers Siri.

"Apple's Siri currently relies on licensed Nuance speech recognition technology," according to an appleinsider.com article.

The expanded, 13,000 square-foot office will provide Apple with enough space to hire around 65 additional people who will likely join those already in Cambridge working on Siri and voice-related technologies. The appleinsider.com article suggested that the extra office space might be an indication that Apple is trying to develop in-house technologies that will replace what has been provided by Nuance.

Apple is not the only company to have kept the details of a 101 Main Street office under wraps: Amazon established its own office there back in 2012, and it is still unclear what the retailer is doing with the research and design space, according to a *Boston Globe* article.

—William Navarre

IN SHORT

didn't go to college.

The deadline to submit the fall 2014—2015 MIT Student Extended Insurance Plan waiver is Monday, September 15. Don't pay the extra \$945 if you don't need to. Students can submit the waiver online at http://www.universityhealthplans.com/mit/.

The Go Global Fair is today, September 9, from 5 p.m. to 7 p.m. on Kresge Lawn. Come learn about op-

portunities for studying abroad, global internships, public service abroad, and international research. Light refreshments will be served.

Student Loan Art Program lottery results will be posted today. Students who are matched with an art piece can pick up their artwork Wednesday, Sept. 9 and Thursday, Sept. 11.

Send news information and tips to news@tech.mit.edu.



GREG STEINBRECHER—THE TECH

A taxi driver crashed into a light pole in front of Building 34 on Saturday afternoon. The driver told a Cambridge Police officer (pictured) that he swerved to avoid a head-on collision when a car, travelling in the opposite direction, tried to pass another car. Vassar Street only has one lane in each direction at the site of the crash.

CYCLING AT MIT NOT ALWAYS SMOOTH

Bike lane redesigns would increase safety. **OPINION, p. 4**

RAP MUSIC FOR CREDIT

Georgia Regents University professor builds English class off of Kendrick Lamar album. **ARTS**, p. 11

JUST FOLLOW THE PROTOCOL

And nothing will go wrong FUN, p. 5



BOSTON CALLING RETURNS TO THE CITY

Fans gathered in City Hall Plaza for the three-day music festival. **PHOTO**, **p. 7**

EARLY SEASON VICTORIES FOR MIT

Football and women's soccer win this weekend. **SPORTS**, p. 12

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General Mills to buy Annie's for \$820 million in cash

Annie's Homegrown, the organic food company known for its mac and cheese and earthy vibe, is joining the General Mills

General Mills, whose stable of brands includes Pillsbury, Cheerios, Haagen-Dazs and Nature Valley, said on Monday that it had agreed to buy Annie's for about \$820 million in cash, in a bet on shoppers' continued demand for natural and organic

The price of \$46 a share is a 51 percent premium over Annie's 30-day average closing price as of Friday, Annie's said. General Mills plans to finance the deal through borrowing. Analysts had speculated this summer that Annie's could be acquired.

Shares of Annie's shot up about 37 percent in trading after the stock market closed on Monday after closing at \$33.51.

Annie's, whose logo is a smiling bunny, makes a line of mac and cheese products as well as pizzas, salad dressings, crackers and other snacks. The company, which was founded in 1989, went public in 2012 after being acquired by the private equity

"Consumers know and trust Annie's purpose-driven culture and authentic brand," Jeff Harmening, the chief operating officer for General Mills United States retail business, said in a statement. "We believe that combining the Annie's product portfolio and go-to-market capabilities with General Mills' supply chain, sales and marketing resources will accelerate the growth of our organic and natural foods business."

Annie's emphasized that it would stay true to its values of healthy food and an environmentally conscious business. And it said it would continue to be based in Berkeley, California.

-William Alden, The New York Times

Home Depot confirms hack

Home Depot confirmed Monday that hackers broke into its store payments systems, in what could be the largest known breach of a retail company's computer network.

The retailer said the exact number of customers affected was still not clear. But a person briefed on the investigation said the total number of credit cards stolen at Home Depot could top 60 million.

By comparison, the breach last year at Target, the largest known attack to date, affected 40 million cardholders.

The Home Depot intrusion may have affected any customer at Home Depot stores in the United States and Canada from April to early last week, said Paula Drake, a company spokeswoman. Customers at Home Depot's Mexico stores were not affected, nor were online shoppers at HomeDepot.com.

Debit card personal identification numbers were not taken,

Home Depot has not yet confirmed details of the breach, Drake said.

But security experts anticipate the Home Depot episode

could eclipse the retail hack at Target last year. Home Depot operates 1,977 stores in the United States and 180 in Canada. That is about 200 more than Target operated

when it was compromised. Home Depot said it would offer free identity protection and credit monitoring services to any customer who had used a credit or debit card at any of its affected stores.

"Honestly, Home Depot is in trouble here," said Eric Cowperthwaite, vice president of Core Security, an Internet security consulting company. Cowperthwaite noted that it was a blog $ger, Brian\,Krebs, not\,the\,company, that\,first\,reported\,the\,breach.$

'This is not how you handle a significant security breach, nor will it provide any sort of confidence that Home Depot can solve the problem going forward," he said.

Last week, before Home Depot had confirmed the hack, customers in Georgia had filed a class-action lawsuit against the retailer for failing to protect customers from fraud and failing to alert them to the breach in a timely manner.

-Nicole Perlroth, The New York Times

US plan to destroy Islamic State could stretch past 2016

Gordon and Helene Cooper

THE NEW YORK TIMES

WASHINGTON — The Obama administration is preparing to carry out a campaign against the Islamic State that may take three years to complete - requiring a sustained effort that could last until after President Barack Obama has left office, according to senior administration officials.

The first phase, an air campaign with nearly 145 airstrikes in the past month, is already underway to protect ethnic and religious minorities and U.S. diplomatic, intelligence and military personnel, and their facilities, as well as to begin rolling back Islamic State gains in northern and western Iraq.

The next phase, which would begin sometime after Iraq forms a more inclusive government, scheduled this week, is expected to involve an intensified effort to train, advise or equip the Iraqi military, Kurdish fighters and possibly members of Sunni tribes.

The final, toughest and most

politically controversial phase of the operation — destroying the terrorist army in its sanctuary inside Syria — might not be completed until the next administration. Indeed, some Pentagon planners envision a military campaign lasting at least 36 months.

Obama will use a speech to the nation Wednesday to make his case for launching a U.S.-led offensive against Sunni militants gaining ground in the Middle East, seeking to rally support for a broad military mission while reassuring the public he is not plunging U.S. forces into another Iraq War.

"What I want people to understand," Obama said in an interview with NBC's "Meet the Press" that was broadcast Sunday, "is that over the course of months, we are going to be able to not just blunt the momentum" of the militants. "We are going to systematically degrade their capabilities; we're going to shrink the territory that they control; and, ultimately, we're going to defeat them," he added.

The military campaign Obama is preparing has no obvious precedent. Unlike U.S. counterterrorism operations in Yemen and Pakistan, it is not expected to be limited to drone strikes against militant leaders. Unlike the war in Afghanistan, it will not include the use of ground troops, which Obama has ruled out.

Unlike the Kosovo war that President Bill Clinton and NATO nations waged in 1999, it will not be compressed into an intensive 78-day tactical and strategic air campaign.

And unlike the air campaign that toppled the Libyan leader, Moammar Gadhafi, in 2011, the Obama administration is no longer "leading from behind," but plans to play the central role in building a coalition to counter the Islamic State.

"We have the ability to destroy ISIL," Secretary of State John Kerry said last week at the NATO summit meeting in Wales, using an alternative name for the militant group. "It may take a year, it may take two years, it may take three years. But we're determined it has to happen."

Syrian bombs hit militant-held territory

By Anne Barnard

BEIRUT — Raids by Syrian warplanes killed at least 25 people, most of them civilians crowding into a bakery, in the northeastern province of Raqqa on Saturday as government forces continued air attacks on territory controlled by the Islamic State, the extremist Sunni militant group.

The Syrian government has increased airstrikes on the group in recent months after it took over government military outposts in Raqqa in a series of newly assertive

Government critics, and increasingly some supporters, complain that President Bashar Assad's forces allowed the foreign-led Islamic State to gain strength and establish its proto-state over the past year, focusing the army's attacks more on Syrian-led militant groups whose main aim is to oust the president.

The Islamic State has a broader goal, to remake the Middle East and establish an Islamic caliphate.

Islamic State gunmen in Raqqa on Saturday appeared to change their positions and leave their offices on the second straight day of heavy airstrikes, though the government assault there still does not appear to equal the intensity of air campaigns against Syrian-led insurgents in the northern city of Aleppo or the suburbs of Damascus, the capital.

The strikes come as the United States weighs whether to augment its recent strikes against the Islamic State in Iraq, where it has overrun much of the north and east, with attacks on the group in Syria.

On Friday and Saturday, the U.S. military continued striking Islamic State targets inside Iraq, according to a Central Command statement issued in Washington.

The airstrikes destroyed four Humvees, presumably U.S.-made vehicles captured by militants from Iraqi security forces; one armored personnel carrier; and two trucks, one mounted with a heavy machine gun, the statement said.

In all, the U.S. military has now carried out 133 airstrikes on Islamic State targets in Iraq.

Islamic State militants have beheaded two American journalists in recent weeks

On Saturday, pictures on social media sites appeared to show the beheading of a captive Lebanese soldier, the second to be killed in captivity since the group raided Arsal, a Lebanese border town, last month, news agencies reported.

A caption posted with the images on a Twitter account used to publish Islamic State statements identified the soldier as Abbas Medlej, a Shiite, Reuters said.

A separate statement, dated Friday, said Medlej was "slaughtered" after a failed escape attempt.

WEATHER

September returns to normal

STAFF METEOROLOGIST

The beginning of September has seen abnormally scorching temperatures at the Institute this year. Three days above 90°F (32°C) have contributed to September being the warmest month of the year so far in Boston. However, the cold front that sent a series of severe thunderstorms over Massachusetts on Saturday afternoon also ushered in a regime of more seasonable weather, and the observed high and low temperatures on each of the last two days have each been within 4°F of their climatological normals.

This weather pattern will c tinue over the next few days as a strong high pressure system slowly slips away to the Northeast, resulting in mostly sunny skies and a moderate easterly breeze. The easterly nature of this wind will allow the relatively cool ocean to moderate air temperatures in coastal regions, resulting in high temperatures right around 70°F (21°C) for today and tomorrow.

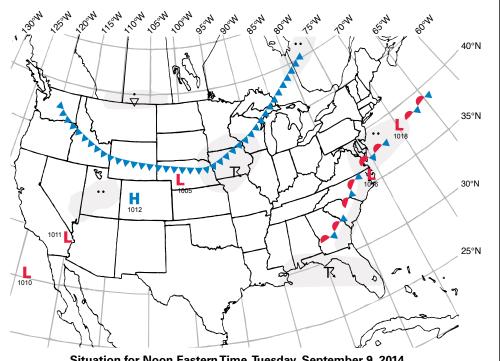
Things will warm up slightly for Thursday as the easterly breeze dies down in advance of an approaching cold front, which will likely bring our next round of showers and thunderstorms on either Thursday night or Friday.

Extended Forecast

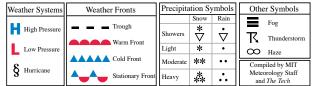
Today: Partly cloudy, high 70°F (21°C). Winds E at 10-15 mph. **Tonight:** Partly cloudy, low 61°F (16°C). Winds E at 5-10 mph. Tomorrow: Partly cloudy with a slight chance of showers, high 70°F (21°C). Winds E at 5-10 mph.

Thursday: Partly cloudy with a chance of showers and thunderstorms, particularly late. Highs in the mid 70s°F (24°C).

Friday: A chance of showers and thunderstorms, particularly early. Highs in the low 70s°F (22°C).



Situation for Noon Eastern Time, Tuesday, September 9, 2014



Princeton faculty to vote on sexual misconduct policies

By Ariel Kaminer

THE NEW YORK TIMES

Princeton University may soon make significant changes in the way it handles allegations of sexual misconduct, including lowering the standards required to find someone guilty in its disciplinary proceedings.

The changes at the university, whose sexual misconduct policies are the subject of a continuing federal investigation, would bring its procedures in line with those at peer institutions and in compliance, administrators say, with federal requirements.

For years, the university has forged its own path on this issue. Many colleges, including all the other members of the Ivy League, consider people to be guilty if a "preponderance of the evidence" suggests they committed sexual assault — basically, if it is more likely than not that they did so.

But Princeton has insisted on a higher burden of proof, convicting people only if there is "clear and persuasive evidence" of assault, a standard usually associated with

criminal proceedings. It has held to that higher standard despite a nationwide directive from the Office of Civil Rights at the federal Education Department that said Title IX — the federal statute that compels equal treatment for male and female students in institutions receiving federal funds - requires the lower "preponderance of the evidence" threshold.

Last week, however, the university's administration endorsed a proposal to lower the threshold.

The faculty committee that drafted that proposal also recommended using trained investigators to adjudicate these cases, rather than members of the Faculty-Student Committee on Discipline, a volunteer body that oversees a wide array of campus infractions. In addition, the committee recommended permitting involved parties to be accompanied by a lawyer, something that was previously forbidden, and affording the right to appeal not just to accused parties but also to

The new policies will be put to a faculty vote Sept. 15. If adopted, they would constitute a major change for Princeton, which had repeatedly argued that the higher burden of proof was necessary to ensure fair proceedings

Announcing the new round of proposed changes, Christopher L. Eisgruber, the president of Princeton, said that in conversations with the Office of Civil Rights, "it became clear that we needed to modify our sexual misconduct policies and procedures to become fully compliant with current Title IX requirements, and that in the interest of fairness to all members of our community we should make these changes as promptly as possible."

The change comes at a moment when sexual assault on college campuses, and the ways in which college administrations respond to it, are subjects of intense scrutiny across the country.

In addition to Princeton, more than 75 other colleges are under investigation for alleged Title IX violations. The White House has weighed in on the issue, convening a task force in January to study the

Qatar's support of extremists alienates allies near and far

By David D. Kirkpatrick

THE NEW YORK TIMES

CAIRO — The visiting sheik told his audience of wealthy Qataris in Doha that to help the battered residents of Syria, they should not bother with donations to humanitarian programs or the Westernbacked Free Syrian Army.

"Give your money to the ones who will spend it on jihad, not aid," implored the sheik, Hajaj al-Ajmi, who the United States recently identified as a fundraiser for al-Qaida's Syrian affiliate.

Qatar is a tiny, petroleum-rich Persian Gulf monarchy where the United States has its largest military base in the Middle East. But for years it has tacitly consented to open fundraising by al-Ajmi and others.

Al-Ajmi's career as a fundraiser is one example of how Qatar has for many years helped support a spectrum of Islamist groups around the region by providing a haven, diplomatic mediation, financial aid and, in certain instances, weapons,

Now, however, Qatar is finding itself under withering attack by an unlikely alignment of interests, including Saudi Arabia, the United Arab Emirates, Egypt and Israel, which have all sought to portray it as a godfather to terrorists everywhere.

Some in Washington have accused it of directly supporting the Islamic State group, a charge that Western officials, independent analysts and Arab diplomats critical of Qatar all call implausible and unsubstantiated.

'That is just disinformation," said Michael Stephens, a researcher based in Doha for the Royal United Services Institute, a British research center. "I am not going to excuse what Oatar has done: It has been grossly irresponsible when it comes to the Syrian conflict, like many other countries," he said.

"But to say that Qatar is behind

ISIS is just rhetoric; it is politics getting in the way of things, and it blinds people to real solutions," he added, using the acronym for another name for the Islamic State.

Propelling the barrage of accusations against Qatar is a regional contest for power in which competing Persian Gulf monarchies have backed opposing proxies in contested places like Gaza, Libya and especially Egypt. In Egypt, Qatar backed the former government led by Muslim Brotherhood

Many analysts say it is Qatar's support for the Muslim Brotherhood that has drawn accusations from other gulf states that have charged that Qatar is funding terrorism in Syria and elsewhere.

"The big falling-out is over Egypt, not Syria," said Paul Salem, a scholar at the Middle East Institute. Now, he said, Saudi Arabia, the United Arab Emirates and the other Gulf states "are putting the squeeze on Qatar."

Google is target of European backlash on US tech dominance

By Danny Hakim

THE NEW YORK TIMES

BRUSSELS - A top German official called for Google to be broken up. A French minister pronounced the company a threat to his country's sovereignty. A European publishing executive likened it to a Wagnerian dragon.

Across Europe, Google has been under fire, reflecting the broader challenges facing U.S. technology companies. Google, fairly or not, has become a glaring proxy for criticism of an intrusive U.S. government and concern over America's unmatched technology dominance.

On Monday, things grew worse. Regulators pushed the company to give up more in an antitrust settlement — demanding that Google make additional changes to its secret sauce, the search algorithm.

When Google initially settled with regulators in February, it emerged largely unscathed, agreeing to make modest adjustments to its search formula and avoiding a fine. Now, the deal is in jeopardy. If Google does not acquiesce, regulators could toss out the settlement and bring formal charges, which could prompt billions of dollars in penalties and major changes to its operations.

The backlash in Europe extends beyond Google. Taxi drivers from London to Madrid have demonstrated against Uber, the U.S. ridesharing company that was recently banned in Germany. Apple and Amazon are being investigated over their tax policies and regulators are scrutinizing Facebook's proposed acquisition of WhatsApp, a messag-

Google, with its broad reach, is arguably facing the most pressure.

Accusations are mounting that Google unfairly exploits its dominant position in search, giving a competitive edge to its growing stable of businesses, like YouTube videos, its Google Play app store and its news alerts.

"We are afraid of Google," Mathias Döpfner, chief executive of Axel Springer, a German publishing giant, wrote in an open letter to Eric Schmidt, Google's executive chairman.

Google has not been idle.

Since 2010, the company has tripled its lobbying budget in Brussels to as much as \$2 million annually, according to public records. Google has hired political insiders, and has tapped at least four outside firms to bolster its own staff of seven registered lobbyists, records show.

'We continue to work with the EC to resolve the concerns they have raised," the company said in an emailed statement about the antitrust settlement, referring to the European Commission.

Much has changed since Google was founded in the late 1990s, and it is now under attack around the

North Korea says American will face trial on Sunday

SEOUL, South Korea - North Korea said on Sunday that it would put Matthew Todd Miller, one of the three Americans known to be held in the country, on trial in a week.

Miller will be tried at the North's Supreme Court on Sept. 14, the country's state-run Korean Central News Agency said, indicating that his trial will be a one-day event with no appeals allowed. North Korea had earlier said Miller shredded his tourist visa and demanded asylum upon arriving in the country in April. Accusing him of unruly behavior, the North had said it would indict him on charges of committing a "hostile act" against the country.

Another American, Jeffrey Edward Fowle, also faced trial for a "hostile act." Last year, an American missionary, Kenneth Bae, was sentenced to 15 years of hard labor on charges of hatching a plot to overthrow the government through proselytizing.

In separate interviews last month with CNN and The Associated Press, the three Americans admitted to being guilty and beseeched Washington to send a high-level envoy to negotiate their freedom.

The United States has repeatedly offered to send its envoy for North Korean human rights issues, Robert R. King, to Pyongyang to appeal for the release of the Americans, but without acceptance. It has no diplomatic relations with North Korea, and relies on the Swedish Embassy in Pyongyang to represent the interests of its citi-

North Korea previously used charges of "hostile acts" to sentence Americans to long prison terms as a means of securing visits from high-profile Americans, like former Presidents Bill Clinton and Jimmy Carter.

Washington has advised Americans against traveling to North

—Choe Sang-hun, The New York Times

India and Pakistan strain as flooding kills hundreds

NEW DELHI — Relief operations struggled on Monday in the Indian-administered portion of Kashmir and in parts of Pakistan where six days of rain and flooding have left hundreds of people

On the Pakistan side of the border, Ahmed Kamal, a spokesman for the National Disaster Management Authority, said more than 190 people had been killed.

Severe damage was caused by the Jhelum and Chenab rivers, which swelled after heavy monsoon rainfall last week, flooding hundreds of villages adjoining the rivers. Thousands of people were displaced, most of them living in tents and waiting for medical supplies and food. The Pakistani military was overseeing relief efforts. On Monday, 970 people were rescued in Punjab, according to a spokesman.

"We did not expect this kind of flood," said Muhammad Hameed, 54, the head of a family of 13 people in the Chiniot district of Punjab. "We were sleeping at night when all of a sudden, water came and we had to rush out of our home."

The Jhelum River also breached its banks in the summer state capital of Srinagar, where water levels rose to 15 to 18 feet at points. The death toll in both countries was expected to rise.

"For the next 48 hours our focus will remain on Srinagar and areas of south Kashmir because there are still a very large number of people stranded without food and water, and our idea is to pull them as quickly as possible," Lt. Gen. D.S. Hooda, chief of the Indian army's Northern Command, said at a news conference.

The army has evacuated about 22,000 people, with 3,000 removed on Sunday, according to a statement. The army distributed food, water, tents and blankets on Monday.

–Nida Najar and Salman Masood, The New York Times

US delegation to review claims of breach of missiles ban

WASHINGTON — With the prospects for future cooperation on arms control hanging in the balance, the Obama administration is sending a team of senior officials to Moscow this week to try to resolve U.S. allegations that Russia has violated a landmark nuclear

At the heart of the dispute is the U.S. allegation that Russia has tested a ground launched cruise missile in violation of the 1987 Soviet-U.S. treaty banning intermediate range missiles based on land. Russia began testing the cruise missile as early as 2008, according to U.S. officials. The Ohama administration first raised its with the Russians in May 2013 and formally alleged that the test was

The U.S. delegation, led by Rose Gottemoeller, the State Department's senior arms control official, is set to meet with Russian officials on Thursday, and includes experts from the National Security Council, the Pentagon and the Energy Department.

The talks would be difficult under the best of circumstances. But they will occur at a time of sharp tensions over Ukraine and broad differences over the future of arms control.

Western experts say that nuclear weapons have assumed a larger place in Russia's military doctrine to compensate for weaknesses in its conventional forces. President Vladimir Putin of Russia reinforced that impression last month when he highlighted Russia's nuclear prowess in comments that appeared intended to dissuade the West from providing military support to Ukraine.

"Russia is far from being involved in any large-scale conflicts," he said at a youth camp outside Moscow. "We don't want that and don't plan on it.

"I want to remind you that Russia is one of the most powerful nuclear nations," Putin said, stressing, "It's best not to mess with

The United States and Russia concluded an arms reduction agreement during Obama's first term in office to cut the number of deployed strategic nuclear warheads to 1,550 by 2018. Russia had already reduced those weapons to 1,512 by March, while the United States had 1,585 warheads.

But senior Russian officials have also signaled that Russia is not ready to negotiate even deeper cuts in long-range nuclear arms.

—Michael R. Gordon, The New York Times



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Bike lanes on campus in need of redesign

Safer options are feasible

By Feras Saad
STAFF COLUMNIST

Used by students, staff, and faculty to shuttle around campus, cycling has become an integral part of MIT's transportation network. While bike racks, service stations, and lanes are very common, there remain key issues which must be brought to the attention of the Office of Campus Planning and the greater cycling community to improve the safety and efficiency of bicycling.

Consider the west portion of Vassar Street stretching from Westgate to the intersection at Mass. Ave. In theory, the current setup of combining the bike lane and pedestrian pavement should work without problems. The Briggs side and Simmons side bike lanes would be used correctly as directed one-way lanes to travel toward and away from campus, with pedestrians walking only on their portion of the pavement and keeping a watchful eye for bikes zooming by.

In reality, cyclists often use the directed, narrow bike lanes for two-way travel, creating a dangerous head-on situation with no protocol on which way each biker should move to avoid a collision. And rather than stay off the bike lane, pedestrians (often wearing headphones) walk in rows of six, occupy the entire pavement, and rarely respond to shouts or bells to move out of the way.

This issue is further complicated by new changes to Vassar Street over the past year. These changes include the relocation of

the Tech Shuttle stop at Simmons, where a horde of students hopping on and off the pavement slows the bicycle traffic to a complete stop during the morning rush, and the Koch Childcare Center, where little children often wander away from their parents and stumble right onto the bike path, creating a potentially disastrous situation.

On the other side of campus, it seems incredible that Memorial Drive offers no safe way for bikes to travel from the Mass. Ave. intersection all the way to Sloan. The road itself contains no striped lanes or shared lane markings, meaning that cyclists are not allowed to ride near the cars. And at seven feet wide, the pavement is much too narrow to handle both pedestrians and two-way bike traffic. I once received a verbal battering by an old man for almost clobbering him as he emerged from Killian Court; to avoid the collision I swerved my bike and ended up swimming in the bushes.

So what can be done?

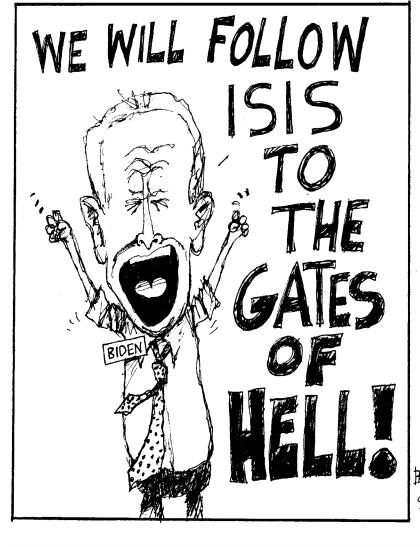
In June 2014, the City of Cambridge Toole Design Group released a paper called *Cycle Tracks: A Technical Review of Safety, Design, and Research,* which contains a thoughtful survey of bike lanes, and a new model for bike lanes to exist in harmony with cars and people. Ideas raised in the paper, which I encourage the Office of Campus Planning to consider, if they haven't already, can be incorporated to alleviate the challenges outlined above.

Regarding Vassar Street, one plausible solution is to keep the bike lane on the pavement, but move the trees to cre-

ate a physical barrier between the bike and pedestrians lanes. An alternate solution would be to narrow the bike lane to discourage cyclists from riding the wrong direction, and place small cones that prevent people from wandering in the way of bikes. Lastly, the road can be widened to incorporate a traditional striped bike lane, which would have the advantage of being parking-protected on the Simmons side and allowing bikes to overtake the shuttle at the bus stop on the Briggs side.

As for Memorial Drive, between the pavement and road lies around eight feet of dirt, serving no purpose whatsoever. This area can be used to introduce the Cycle Track model, which is essentially a road for bikes separated by a striped yellow line . A small barrier could be introduced between the walking and biking sections, with exits and entries at key locations like Killian Court and Hayden Library. As an immediate measure, the pavement should be designated as a no-bike zone given the high risk and frequency of accidents.

As an inexpensive, healthy, and environmentally friendly mode of transport, the cycling network should continue to be supported by campus planners for years to come. In addition to the previous examples, there are problematic spots all over campus, such as dorm row, where bikes often squeeze between the Tech Shuttle and delivery vans parked halfway on the sidewalk. A careful redesign of bike lanes at MIT would ensure a safer and more efficient experience for all commuters in our community.





OPINION POLICY

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Dissents are the signed opinions of editorial board members choosing to publish their disagreement with the editorial.

Letters to the editor, columns, and editorial cartoons are written by individuals and represent the opinion of the author, not necessarily that of the newspaper. Electronic submissions are encouraged and should be sent to *letters@tech.mit.edu*. Hard copy submissions should be addressed to *The Tech*, P.O. Box 397029, Cambridge, Mass. 02139-7029, or sent by interdepartmental mail to Room W20-483. All submissions are due by 4:30 p.m. two days before the date of publication.

Letters, columns, and cartoons must bear the authors' signatures, addresses, and phone numbers. Unsigned letters will not be accepted. *The Tech* reserves the right to edit or condense letters; shorter letters will be given higher priority.

Once submitted, all letters become property of *The Tech*, and will not be returned. Letters, columns, and cartoons may also be posted on *The Tech*'s Web site and/or printed or published in any other format or medium now known or later that becomes known. *The Tech* makes no commitment to publish all the letters received.

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FUNFUNFUNFUNFU

Somewhere on the Search for Meaning... by Letitia Li



Sudoku

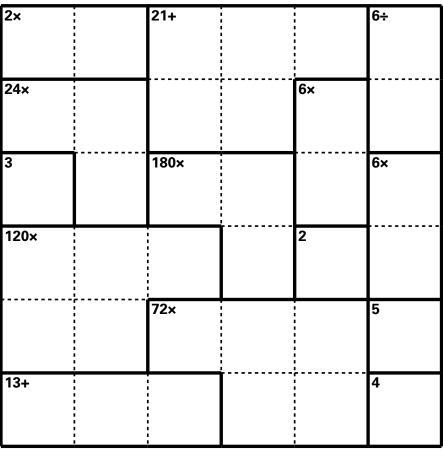
Solution, page 9

	9	2			5			
8			2					
6 9	4	1	9				5	
9				4				
	2	4	7		6	8	3	
				8				7
	1				4	3	7	6
					1			8
			8			5	1	

Instructions: Fill in the grid so that each column, row, and 3 by 3 grid contains exactly one of each of the digits 1 through 9.

Techdoku

Solution, page 9



Instructions: Fill in the grid so that each column and row contains exactly one of each of the numbers 1-6. Follow the mathematical operations for each box.

Saturday Stumper by S.N.

Solution, page 9

ACROSS

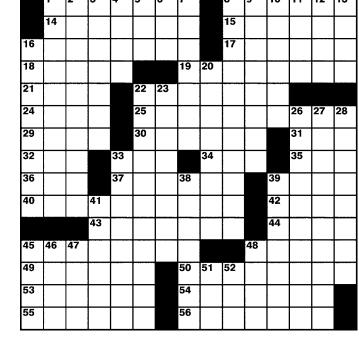
- 8 Chicks and ducks and geese
- 15 Literally, "want of blood"
- 16 Of bugs
- 17 Came down hard 18 __ Jubilee (Carl Perkins'
- network TV debut)
- 19 Figures up
- 21 Authoritative imposition 22 Fully inferable
- 24 Food tested as cannon ammunition on
- Mythbusters 25 Venial
- 29 Winsome
- 30 General at Brandywine
- 31 The Graduate begins there
- 32 Cronkite's WWII-era employer
- 33 It may be used for Mensa admission
- 34 Metaphorical payback
- 35 Juicy Fruit gum's 1974
- packaging innovation 36 Name above Theda on a

- Silent Screen Star stamp
- 37 Overzealous scouts
- 39 Take-out order
- 40 Emma Watson's major at Brown
- 42 Lunar-surface explorations, for short
- 43 Puts down stakes, quite possibly 44 "Words are __ daughters":
- Samuel Johnson 45 Oscar real-life role of 1996
- 48 Negation sign, in logic
- 49 America's best-selling Blu-
- ray film 50 Takes care of itself
- 53 Stop using for good
- 54 Shop-at-home advocate
- 55 Makes oneself smart 56 They can stand at five weeks or so

DOWN

- 1 Exploited
- 2 Bringing up, in a way
- 3 What might be heard with

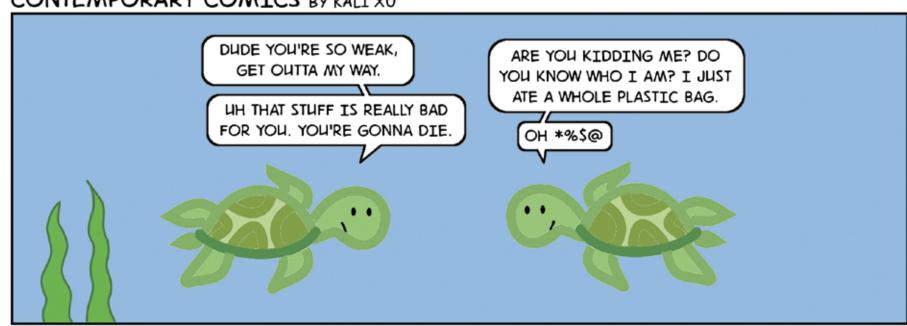
- a ring
- 5 Absolutely unused, in eBay
- 6 Why a maid's not mad?
- 7 Edgar Award winner in '65 8 They get orchestra seats
- 9 Jon Stewart's "world
- passing around notes in a classroom"
- 10 Genghis Khan conquest, 1219-21
- 11 Skin-care oil source
- 12 Risk requires their use
- 13 Retailer with "his and hers" Michigan Avenue stores
- 16 What can be edited with the Avogadro app
- 20 Kinetic digression
- 22 Newborns' health measures
- 23 Cone + band, perhaps
- 26 Rolling Stone called it "a doleful prom anthem"
- 27 Northernmost indigenous Europeans

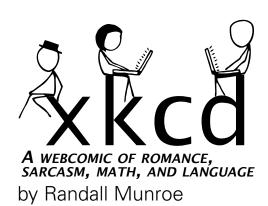


- 28 Much intemperance
- 33 Second NAACP president
- 38 Symbol of New Haven
- 39 Narrator of The Ten Commandments
- 41 Progressive, unkindly 45 Depiction on Irish euros
- 46 Non-stop
- 47 Way to run or sleep
- 48 Pains
- 51 Elasticity symbol in
- economics 52 2012 AFTRA merger
- partner

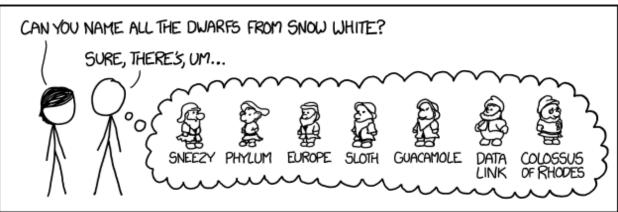
6 THE TECH
TUESDAY, SEPTEMBER 9, 2014

CONTEMPORARY COMICS BY KALI XU





[1417] **Seven**



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Tuesday, September 9, 2014

The Tech 7



Boston Calling



This past weekend saw the Boston Calling music festival return to City Hall Plaza for the second time in 2014. The event ran from Friday to Sunday and featured artists such as Nas, The Roots, Lorde, and Sky Ferreira.

- 1. Concertgoers rocked to Nas at the 2014 Boston Calling music festival on Sunday night.
- 2. Following a delay for severe weather, Lorde played a shortened fifty minute set on Saturday evening.
- 3. Sky Ferreira performed Saturday afternoon at Boston Calling, held in City Hall Plaza.
- 4. Childish Gambino closed out the Saturday lineup of the festival, also playing a shortened set due to the severe weather delay.
- 5. Nas co-headlined the festival with The Roots and played the closing slot on Sunday evening.







EVENTS SEPT. 09 – SEPT. 15

TUESDAY

(4:00 p.m. - 5:00 p.m.) The Search for 100 Earths, with speaker Debra Fischer of Yale, sponsored by Kavli Institute for Astrophysics and Space Research — 37-252

(5:00 p.m. - 7:00 p.m.) Go Global Fair, with on-campus global programs and other global program providers, sponsored by MIT Global Education & Career Development — Kresge Lawn (Bush Room in inclement weather)

WEDNESDAY

(7:00 p.m. - 9:00 p.m.) t=0 Hardware Innovation Night: 2014 Student Showcase, with speakers Neil Gershenfeld and Peko Hosoi of MIT Startups & Innovators, sponsored by Martin Trust Center for MIT Entrepreneurship — N51 (MIT Museum)

THURSDAY

(2:00 p.m. - 3:30 p.m.) How to Work a Career Fair, sponsored by MIT Global Education & Career Development (advanced registration requested via CareerBridge) — 35-225

(7:00 p.m. – 9:00 p.m.) t=0 Healthcare Innovation: 2014 Student Showcase, with speaker Michael Cima of MIT Healthcare Startups & Innovators, sponsored by Martin Trust Center for Entrepreneurship — N51 (IDC third floor)

FRIDAY

(3:00 p.m. - 4:30 p.m.) Technical Interviewing 101, featuring Google, sponsored by MIT Global Education & Career Development (advanced registration requested via CareerBridge) —

(7:00 p.m. – 9:00 p.m.) LSC shows The Fault in Our Stars, tickets \$4 in lobby 16 — 26-100

SATURDAY

(10:00 a.m. - 10:00 p.m.) Boston Festival of Indie Games, tickets \$10, sponsored by Comparative Media Studies/Writing — W34-101, 32-123, 32-124, 32-144

(2:00 p.m. - 3:00 p.m.) Space Racers: behind the scenes with the show's creator, free with museum admission — N51 (MIT Museum)

SUNDAY

(6:00 p.m. - 9:00 p.m.) Welcome BBQ and Mid-Autumn Festival, sponsored by the MIT Singapore Students Society — W16 (Kresge BBQ pits)

(7:00 p.m. - 10:00 p.m.) Chinese Association of Science and Technology Mid-Autumn Festival Party, showing "A Bite of China," with food, drinks, and mooncakes, sponsored by GSC and CAST. Sign up at http://signup.mit.edu/2014MidAutumn —

MONDAY

(1:00 p.m. - 2:00 p.m.) 10 Simple Steps to Building a Reputation as a Researcher in Your Early Career, with speaker Micah Altman, Director of Research at MIT Libraries, registration online, sponsored by Postdoctoral Association, Office of the Vice President for Research, MIT Libraries — 46-3189

Send your campus events to events@tech.mit.edu.



Joanna K. Chen '15 receives some bike repair tips from Armando Quiros of Bike Boom in Davis Square during Bike Fest this past Sunday. The event, sponsored by MIT PN2K and GSC Sustainability, was an opportunity for members of the MIT community to get a quick bike tune up, advice on maintenance, and information about bike safety in Cambridge and Boston.

Access to elite colleges varies

Vassar tops list, committed to helping poor students

Universities, from Page 1

reached record levels. Yet for many low-income children - even many who get A's in high school and do well on the SAT — college remains out of reach. No wonder that upward mobility is less common in the United States than in many other rich countries.

To see which selective colleges are doing the most, and the least, to change the situation, The Upshot has analyzed data for every college with four-year graduation rate of at least 75 percent. We combined data on enrollment and tuition costs to measure how hard each college is trying to attract and graduate poor and middle-class students. The result is our College Access Index.

Vassar, the once all-female college in the Hudson River Valley, tops our index, with Grinnell placing second. About 23 percent of Vassar's freshmen in recent years have received federal Pell grants (which mean they come from roughly the bottom 40 percent of the income distribution), up from 12 percent in 2007. After taking scholarships into account, the average annual cost of attending Vassar for lower-income students is about \$6,000. Students cover much of that cost through campus jobs and loans.

The biggest theme to emerge from our analysis is that otherwise similar colleges often have very different levels of commitment to economic diversity. In this area, endowment is not destiny, and prestige is not destiny.

After Vassar, the top of the list includes some of the wealthiest colleges in the country, measured by endowment per student: Grinnell; Amherst College, in Massachusetts; Harvard; and Pomona, in Southern California. But other resource-rich colleges, including Swarthmore and the California Institute of Technology, have done substantially less.

In the middle of last decade, Lawrence Summers, then the president of Harvard, called attention to the issue and made Harvard's financial-aid policies much more generous. Given Harvard's prominence, other colleges began to look at the situation as well.

If the number of college graduates from low-income backgrounds is going to rise sharply, it's true that most of them won't come from selective colleges like Grinnell. But those colleges still have an outsize

For one thing, the low-income students who enroll there tend to graduate. For another, research has shown that the individual college attended by upper-middle-class students has little effect on their eventual earnings, after controlling for their SAT scores. But it does seem to matter for poor students. They get something extra from a top college.

That is why it's worrisome that so many students are falling through the cracks - and that the student body at many elite campuses remains largely affluent. But it may not always be so.

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Tuesday, September 9, 2014 THE TECH 9

for Bitcoin projects *Projects address understanding*

of currency and encourage its use

Bitcoin, from Page 1

randa expressed his hope that CoinJoin "will be used to help preserve the privacy of bitcoin users."

The Improving MIT Award, for the project "with the most potential for improving some aspect of student life at MIT," went to MIT undergraduates Mitchell Gu '18, Jiahao Li '18, and Nelson Liu '15, who worked together to create Bit-Station. The application is a Bitcoin wallet tailored specifically to the MIT community and is designed to function like email and social media sites with features like a public network feed and transaction messages

BitStation was intended to help people who do not understand how bitcoin works or how to use it by "providing a concise and easy to use interface," said Liu in an email to The Tech.

The winners of BitComp's "awesome award" were Samuel Udotong '16 and Drexel University sophomore Om Mahida, the creators of Fireflies, a "communitybased task sharing application facilitated by bitcoin payments," according to the release.

BitComp's "next billion award" was awarded to the team that best addressed challenges in developing nations. The winning project was Rex Mercury, created by Sloan graduate Will Clurman, Michelle Higa Fox of Brown University, Brett Ludwig of Alberta & Grant Macewan University, Allan Onyango of Egreton University, and Matt Utterback of Oberlin College and Central European University.

Rex Mercury is a system of SMS relays from bitcoin to payment

processors, and its purpose, Clurman told The Tech, is to ensure that people can use bitcoin wherever Internet is available. While moving cash between countries may entail unnecessary costs, delays, and uncertainties, he said, "bitcoin enables payments to be boundless."

The "evangelism award," for projects that spread bitcoin technology to new users, was given to the team of MIT computational biology PhD student Nezar Abdennur, Boston University computer science PhD student Ethan Heilman, and Adam Tavares, a graduate of Bridgewater State College. Their project, PotLucky, is designed to allow secure off-blockchain transactions and encourage the usage of bitcoin by making it easy for users to pool their bitcoin for joint purposes. "Our goal was to find a way to make bitcoin more usable trust scenario," said Abdennur in an email to The Tech.

In another instance of the cryptocurrency's expansion on campus, the MIT Coop at Kendall announced in late August that it would handle bitcoin as payment for its products.

MIT Coop accepts bitcoin

In an interview with The Tech, Miguel Suarez, general manager of the MIT Coop, confirmed that the Kendall location is currently accepting bitcoin as payment. Bit-Pay, a bitcoin payment processor, offered to provide the Coop with the ability to receive bitcoin from students using an app that can be accessed on any smartphone. The new method of payments aims to help eliminate credit card transac-

Students awarded | Austin Travis dead at age 26

Travis, from Page 1

Charles Wood told the Globe that his daughter and Travis were living together in Cambridge and planned to get married in about a year. He called Travis "a young man who had a lot to look forward to."

Reif encouraged members of the community to reach out to one another, adding, "The strength of our community is the strength of countless individual bonds of kindness, awareness, sympathy and support."

Reif said plans to memorialize Travis would be shared with the community.

MIT's student support and mental health services can be found at http://together.mit.edu. Reif also directed students who felt affected by the death to Student Support Services and their residential advisors or graduate resident tutors.

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Be a PENguin

Solution to Sudoku

3	9	2	4	6	5	7	8	1
8	7	5	2	1	3	6	9	4
6	4	1	9				5	3
9	8	7	3	4	2	1	6	5
1	2	4	7	5	6	8	3	9
5	3	6	1	8	9	4	2	7
2	1	8	5	9	4	3	7	6
7	5	3	6	2	1	9	4	8
4	6	9	8	3	7	5	1	2

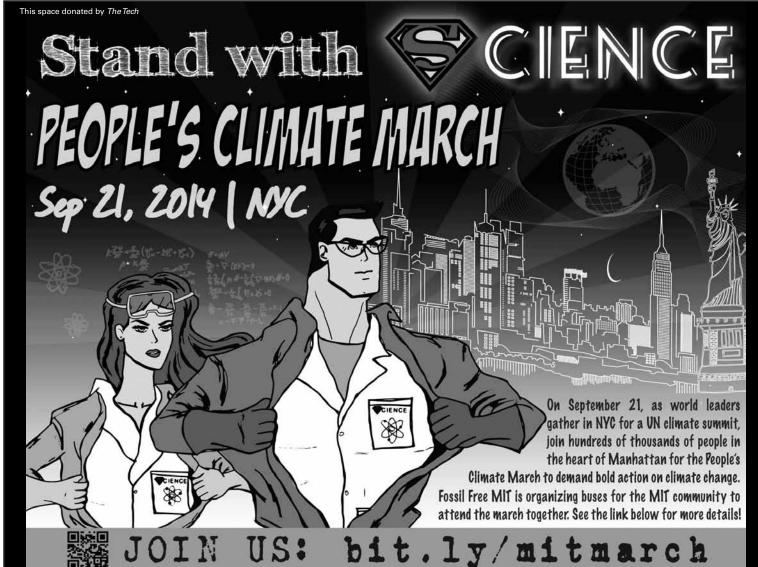
Solution to Techdoku

from page 5

1	2	4	3	5	6
2	3	5	4	6	1
3	4	6	5	1	2
4	5	1	6	2	3
6	1	3	2	4	5
5	6	2	1	3	4

Solution to Crossword





10 The Tech Tuesday, September 9, 2014

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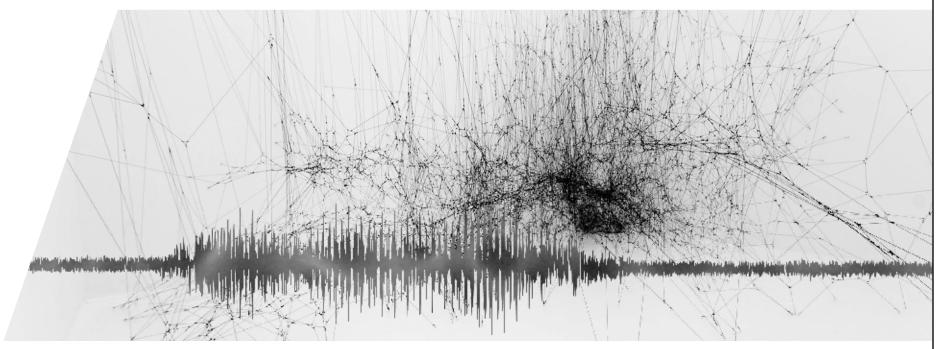
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SEEING / SOUNDING / SENSING

A SYMPOSIUM PRESENTED BY THE MIT CENTER FOR ART, SCIENCE & TECHNOLOGY SEPTEMBER 26-27, 2014 / MIT Media Lab



Seeing / Sounding / Sensing is an intensive two-day event at MIT that invites creative artists to join with philosophers, brain and cognitive scientists, anthropologists, historians and scholars from a range of disciplines in an open-ended discussion about knowledge production. The goal is to challenge each domain's conventional certainty about "what is known," "how we know it," or "how we can know more," and to stimulate new issues for cross-disciplinary scholarship in the future.

The MIT CAST Symposium is funded by Philip S. Khoury, Associate Provost with responsibility for the arts; Deborah K. Fitzgerald, Dean of the School of Humanities, Arts, and Social Sciences; and Adèle Naudé Santos, Dean Emerita of the School for Architecture and Planning, with additional support from the Eugene McDermott Award in the Arts at MIT and the Council for the Arts at MIT.

Image: Soundwave of Alvin Lucier's *Music on a Long Thin Wire*, colored with Tauba Auerbach's *CMY4*; and *14 billions (working title)*, 2010 © Studio Tomás Saraceno.

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Honorary Chair:

Lore Harp McGovern

Keynote Speaker:

Bruno Latour

Brain & Cognitive Sciences:

Bevil Conway Josh McDermott Tomaso Poggio Josh Tenenbaum

Visual & Performing Arts:

Tauba Auerbach Alvin Lucier Tomás Saraceno

Humanities & Social Sciences:

Stefan Helmreich Caroline Jones David Kaiser Brian Kane Leila Kinney Carrie Lambert-Beatty Mara Mills Alva Noë Alex Rehding Natasha Schüll Alma Steingart

The good kid is going back to school

Kendrick Lamar's album good kid mAAd city to be the subject of new college course

By Nate Garcia

This past week, news circulated that Georgia Regents University Professor Adam Diehl had chosen rapper Kendrick Lamar's album good kid mAAd city (2012) as the subject of his English class Good Kids, Mad Cities.

The course description available on the university website reads: "Taking its name from Kendrick Lamar's 2012 album, this course will examine the role of urban living on the development of young people. In Kendrick's case, 'the streets sure to release the worst side of my best' (Lamar 58). By studying and analyzing various literature, films, and K. Dot's album, we will consider what effects our characters' surroundings have on who they become as adults. The cities we will be visiting, in our imaginations, are Dublin, New York, Chicago, and Los Angeles. Assignments will include a substantial research paper, stemming from the topics inherent in our texts; students should also expect other writing assignments, such as short papers and online discusThis is the latest example of hip-hop's continuing inclusion in academia and acceptance as an art form worthy of close analysis. While it is an incredible honor for Kendrick Lamar, which I think he has rightfully earned, it strikes me as another reminder that so much of hip-hop is overlooked.

If I were to give a State of the Union address for hip-hop I would not begin the way we usually hear our presidents start. I wouldn't say hip-hop is strong. I wouldn't say we are doing well. We are still recovering from the cultural amnesia that struck our community after the golden age in the nineties. While many hip-hop enthusiasts see our current times as a renaissance, the issues and problems created by the rise and commercialization of the industry persist and are perhaps more firmly rooted than ever.

Too many people today think they are contributing to this supposed hip-hop renaissance by sharing the belief that Kendrick Lamar is a gifted artist, even if removed from the context of hiphop. The problem with this erroneous belief is that it allows people to stop looking at hip-hop as a whole, and pushes more attention to a specific artist.

Given that a focus on Lamar's album alone would exclude the context of hip-hop, it would be my sincerest hope that the class would also talk about NWA's portrayal of Los Angeles in the late eighties with their album *Straight Outta Compton* (1988) or Nas's masterpiece painting of life in Queensbridge housing projects with *Ill-matic* (1994).

Countless other works, such as Notorious BIG's *Ready to Die* (1994) and Outkast's *Aquemini* (1998), maintain the same cohesiveness throughout that earned Lamar's album so much acclaim. In the same way that the events in Ferguson have inspired some artists to speak up, release tribute tracks, or tracks inspired by the events, much of hip-hop is fueled by community and circumstances.

Lamar himself admitted in countless interviews that his album was nothing new. He grew up listening to concept albums, projects that had a central theme, and felt that particular style was missing in hip-hop today. His goal

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COURTESY OF KENDRI

Kendrick Lamar's 2012 album *good kid mAAD city* is going to be the focus of a new college course.

then was to reintroduce people to the power and presence to be achieved by centralizing and building cohesively.

Success in the hip-hop community isn't something to be achieved overnight, or with a radio single, but through careful study and appreciation of the culture itself. Artists such as Kendrick Lamar grasp what so many of us let slip as we praise him: that to understand the music, you have to understand the culture and com-

munity. As Nas has said, hip-hop is the music of the streets, an invaluable archeological tool to understanding the communities and populations for which it speaks.

Listening to hip-hop without understanding its context is like looking at half a painting. Sure, you can appreciate it, but you might be missing something that changes the entire perspective.

Congratulations to Mr. Lamar and to all those who decide to look deeper.

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Lone goal lifts MIT past Claremont-Mudd-Scripps

An early goal gives MIT's nationally ranked women's soccer team the desired win

By Matthew Noonan

DAPER STAFF

For the third time this season, MIT's

women soccer team, ranked 25th in the nation and third in the region in the latest National Soccer Coaches Association of America (NSCAA) poll, earned a one-goal victory as the Engineers defeated Claremont-Mudd-Scripps,

1-0, on Sunday morning at Roberts Field

at Steinbrenner Stadium. The Engineers and Athena's were originally scheduled to face-off on Saturday, September 6 at 7:00 p.m., but due to inclement weather the game was postponed to the morning of Sunday, September 7.

MIT's Jennifer R. Ibanez '16 scored the game's lone goal at 8:26 in the opening stanza following a feed from Olivia M. Struckman'17 outside the Claremont-Mudd-Scripps box. Struckman reversed direction while being defended outside her opponent's box and located Ibanez,

who lofted a shot past goalkeeper Molly Freed into the top left corner of the Athena's goal.

Tech tried to extend its lead later in the session with attempts by Ambika M. Krishnamachar '15 and Page Uriarte '16, but both shots sailed to the right of Claremont-Mudd-Scripps' goal. MIT finished with six shots — four in the first half — and three shots on goal. Krishnamachar led the Engineers with two shots, but Claremont-Mudd-Scripps' Laynee Laube paced all players with three shots.

Claremont-Mudd-Scripps concluded the match with 10 shots, seven attempts in the second half. Laube, and Darrah Shields combined for the game's final three shots, but goalkeeper Lauren S. Ullmann '17 turned away each attempt. Ullmann, who finished with a season-best nine stops, has pitched four consecutive shutouts this season and eight in an Engineers uniform.

MIT returns to action on Wednesday, September 10 when they travel to Tufts University for a 4 p.m. kickoff.

Women's volleyball team places second in weekend tourney

Engineers return home from the Vassar College Invitational with a 3-1 ledger

By Mindy Brauer

DAPER STAFF

The MIT women's volleyball team compiled a 3-1 ledger as it was the



a 3-1 ledger as it was the runner-up at the Vassar College Invitational this past weekend. The Engineers (7-1) fell to SUNY New Paltz in the opener (21-25, 19-25, 25-23, 25-22, 15-13) before outlasting the host

Brewers, 23-25, 25-9, 27-29, 25-19, 15-9, in Friday's nightcap. MIT made quick work of its opponents on Saturday as it swept the College of Mount Saint Vincent (25-9, 25-13, 25-14) and Ramapo College (25-17, 25-16, 25-19). Nicole C. Gagnier '15 represented the Cardinal and Gray on the All-Tournament Team

In the five-set loss to New Paltz, Megan E. Gebhard '17 generated a match-high 21 kills and added two blocks as Jennifer L. Astrachan '15 recorded 10 kills and two blocks. Jennifer A. Glerum '17 posted 10 digs, and eight kills while Morgan R. Stewart '14 (Powell, Ohio) rounded out the front row with five kills. Tori L. Wuthrich '17 compiled 23 digs and three aces as Lisette G. Tellez '18 collected 12 digs. Allison A. Davanzo '18 bolstered the defense with three blocks while Clare Farley '18 earned three aces. Gagnier finished the match with 44 assists and 16 digs.

Against Vassar, Gebhard led the way with 20 kills, a .318 hitting performance, and four blocks in the five-set thriller. Astrachan posted nine kills

and three aces as Meryl E. Gibbs '16 tallied seven kills, a .429 hitting percentage, and five blocks. Glerum rattled off six kills, five digs, two aces, and two blocks while Farley paced the Engineers with 17 digs and five aces. Wuthrich had 13 digs, followed by 10 from Tellez. Davanzo came up with five blocks as Gagnier totaled 40 assists and 10 digs.

Glerum led a strong serving unit versus Mount Saint Vincent as she registered eight aces. Senior Angela Ha (Houston, Texas) tacked on three aces while Farley had two of her own. Rachel E. Parus '18 tallied nine kills, five digs, and two blocks as Angie W. Boggust '18 notched five kills and two blocks. Stewart racked up four kills, four digs, two aces, and two blocks while both Lara G. Markey '17 and Gebhard chipped in three kills. Tellez anchored the defense with 16 digs as Lauren E. Uhr '17 generated seven digs. Chloe C. Dlott '16 produced two blocks while Gagnier registered 21 assists and six digs.

In the finale with Ramapo, Astrachan amassed 14 kills and a .423 hitting percentage as Gebhard rattled off 11 kills, a .357 hitting performance, and three blocks. Glerum totaled 10 digs, seven kills, a .333 hitting effort, and three blocks while Davanzo strengthened the front row with seven kills and two blocks. Bogust produced three blocks in one set as Wuthrich collected a team-high 14 digs. Farley and Tellez both had seven digs while Gagnier closed the tournament with 34 assists and nine digs.

Win over Pomona-Pitzer gives football team 1-0 start to season

MIT manages to overcome early deficit and win 28-18

By Phil Hes

Hosting Pomona-Pitzer College in a return game from a year ago, the MIT football

team erased an early lead by the Sagehens to take a 28-18 win in the 2014 season opener for both squads. Bradford L. Goldsberry '15 scored a pair of touchdowns, one through the air and one on the ground, to help the Engineers

win their season opener for a fifth straight year.

After the two teams traded punts to start the contest, MIT (1-0) looked to be driving for the first score of the game when Peter J. Williams '15 saw his pass attempt intercepted by Don Swan, who returned it 24 yards to the Pomona 34. One play later Aseal Birir broke free down the right side for a 58-yard score to put the Sagehens on top 7-0.

MIT answered on the next drive, however, tying the game with a six-play, 70-yard effort that saw Goldsberry take it in from two yards out to tie it a 7-7 with 5:47 left in the opening quarter. The Engineers then halted the next drive by Pomona-Pitzer (0-1) when Laith A. Maswadeh '15 and Kevin P. Kusch '17 stopped Birir on a fourth-down play. Six plays later Williams found Samuel J. Inman '16 open down the right side for a 29-yard score to give the Engineers their first lead of the afternoon.

Pomona-Pitzer scored the only points of the second quarter, getting a pair of field goals from Kevin Masini that capped long drives by the Sagehens. His second finished off both a 14play, 79-yard drive and the second quarter has his 32-yard attempt sailed through the uprights to close the half and make it a one-point game at 14-13.

After Maswadeh stopped Birir on a fourth-

down play on Pomona-Pitzer's first drive of the second half, MIT went 88 yards in 13 plays to increase its lead as Williams ran it in from four yards out with 5:27 on the clock to make it 21-13. The Engineers then forced a three-and-out on the next drive by the Sagehens, taking over at their own 20 after a punt. Williams then led the Engineers down the field, completing all four of his pass attempts for 60 yards, with his final completion to Goldsberry from five-yards out for a 28-13 advantage with 14:36 left in the game.

Pomona-Pitzer came back on its next drive, with Masini capping the 65-yard effort with his third field goal of the game, this time from 27 yards out to cut the Engineers lead to 28-16 with 8:21 left. With under five minutes to play the Sagehens drove from their own 25 all the way down to the MIT 5 where they faced fourth-and-one. Quarterback Alex Bresler tried to get the first down himself up the middle, but Kusch and Mitchell P. Turley '18 stopped him cold, giving the ball back to MIT with 1:12 to go.

Pomona's defense held and the Sagehens used their timeouts to force an MIT punt attempt, but Williams took the snap and stepped out of the back of the end zone for a safety. Pomona-Pitzer got the ball on its own 38 after the free kick, but four straight incompletions by Bresler ended any hopes for the Sagehens.

Justin R. Wallace '15 rushed for 126 yards on 20 carries to lead the MIT ground attack. Birir was impressive in his collegiate debut, gaining 190 yards on 23 carries with one score. Williams completed 14 of 19 passes for 221 yards and two scores, while Bresler was 18-for-39 for 147 yards.

MIT will remain home for its next contest, with the Engineers hosting Becker College on September 13 at 1:00 p.m. Pomona-Pitzer will return to California where the Sagehens will host Rhodes College on September 20 at 7:00 p.m. in its home opener.

UPCOMING HOME EVENTS

Thursday, September 11

Field Hockey vs. Nichols College

6 p.m., Jack Barry Field

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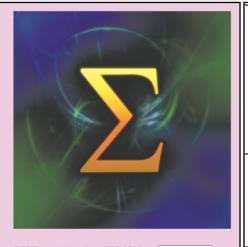
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By The Tech Sports staff

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